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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/622,752

07/18/2003

Dave Allen Soerens

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07/12/2006

Maxwell J Petersen
Pauley Peterson Kinne & Erickson
Suite 365
2800 West Higgins
Hoffman Estates, IL 60195

EXAMINER

JOHNSON, EDWARD M

ART UNIT

PAPER NUMBER

1754

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/622,752

Applicant(s)

SOERENS, DAVE ALLEN

Examiner

Edward M. Johnson

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-21 and 23-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-21 and 23-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1754

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-10, 12-21, 23-37 are rejected under 35 U.S.C. 103(a) as unpatentable over Harada et al. US 5,853,867 in view of Gander US 3,951,893.

Regarding claims 1, 14, 25, Harada '867 discloses an absorbent comprising cationic absorbent polymer and anionic absorbent polymer fixed to a substrate through a binder, which is crosslinked during or after polymerization (column 3, lines 45-48; column 5, lines 1-10; column 8, line 54 to column 9, line 16). An absorbent capacity of 5 g/g is also disclosed. The claimed binder species are disclosed (columns 4-5 and 8) and disclosed temperature is less than 120 degrees (Examples), which would have obviously, to one of ordinary skill, suggested the process-of-making limitation of "spontaneous" crosslinking because the same advantage of low temperature is achieved

Art Unit: 1754

(instant specification, page 11, lines 21-25) and would thus the ordinary artisan would have reasonably expected to favorably achieve the same composition features as instantly claimed.

Harada fails to disclose anhydrous salts or capillary desiccants.

It is considered that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a capillary desiccant in the absorbent of Harada because Harada discloses starches (see column 8, lines 27-31) and acetate (see column 4, lines 38-40), which would obviously, to one of ordinary skill, suggest an anhydrous salt or a capillary desiccant (see also instant specification, pages 18-19).

Harada fails to disclose alkoxysilane functionality.

Gander discloses polymeric composition comprising a silane crosslinked interpolymer of alkyl acrylate (first monomer) and other unsaturated monomers (second monomer) the instant range. Suitable silane acrylate crosslinking monomers include the alkoxysilane expressed in the present claims. The crosslinking occurs at drying temperature. The reference teaches the incorporation of a second monomer, which may be alkaline, acid labile, thus encompass the limitations expressed in claims (col. lines 16-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the alkoxysilane of Gander in the absorbent desiccant of Harada because Gander discloses the alkoxysilane for use in an absorbent to absorb bodily fluids (see composite compositions section), which is conveniently disposable (see summary).

Regarding claims 2-3 and 5, 12-13, 15-21, 23-24, Harada discloses above 30% by weight of polymer (see column 7, lines 50-55), which would at least suggest an optimum ratio of polymer to desiccant or mole percent.

Regarding claims 4, 7, 9-10, and 31-37 the claimed binder and polymer species are disclosed (columns 4-5 and 8) and the disclosed temperature is less than 120 degrees (Examples). Gander further discloses cellulosic paper (see column 7, lines 58-60) and maleic anhydride (claim 1), which would obviously, to one of ordinary skill, suggest anhydrous salt or capillary desiccant.

Regarding claims 6 and 8, Harada discloses cationic and anionic absorbent polymer (see column 7, lines 43-45).

Regarding claims 26-30, Harada discloses various intended uses (see columns 1-2).

Response to Arguments

3. Applicant's arguments filed 6/12/06 have been fully considered but they are not persuasive.

It is argued that one of the most fundamental tenets of patent law... in Applicant's specification. This is not persuasive because such consideration was given and the claimed binder species are disclosed (columns 4-5 and 8) and disclosed temperature is less than 120 degrees (Examples), which would have obviously, to one of ordinary skill, suggested the process-of-making limitation of "spontaneous" crosslinking because the same advantage of low temperature is achieved (instant specification, page 11, lines 21-25) and would thus the ordinary artisan would have reasonably expected to favorably achieve the same composition features as instantly claimed. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

It is argued that second, it is important to emphasize that... prior to crosslinking. This is not persuasive because Applicant claims a product, while arguing a distinction based on the process of making thereof. And, in any case, Harada '867

Art Unit: 1754

discloses an absorbent comprising cationic absorbent polymer and anionic absorbent polymer fixed to a substrate through a binder, which is crosslinked during or after polymerization (column 3, lines 45-48; column 5, lines 1-10; column 8, line 54 to column 9, line 16).

It is argued that while various cationic absorbent polymers... (Col. 4, line 54 - Col. 5, line 29). This is not persuasive because Gander, not Harada, is relied upon for a disclosure of such functionality. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It is argued that the anionic absorbent polymer of Harada... (Col. 6, lines 15-56). This is not persuasive because Harada '867 discloses an absorbent comprising cationic absorbent polymer and anionic absorbent polymer fixed to a substrate through a binder, which is crosslinked during or after polymerization (column 3, lines 45-48; column 5, lines 1-10; column 8, line 54 to column 9, line 16).

It is argued that while various anionic absorbent polymers... (Col. 6, lines 15-47). This is not persuasive because Gander, not Harada, is relied upon for a disclosure of such

functionality. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It is argued that furthermore, as previously explained, Harada does not... prior to crosslinking. This is not persuasive because Applicant claims a product, while arguing a distinction based on the process of making thereof. And, in any case, Harada '867 discloses an absorbent comprising cationic absorbent polymer and anionic absorbent polymer fixed to a substrate through a binder, which is crosslinked during or after polymerization (column 3, lines 45-48; column 5, lines 1-10; column 8, line 54 to column 9, line 16).

It is argued that finally, Harada does not contain any... in the absorbent polymer. This is not persuasive because the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed.

Art Unit: 1754

Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the alkoxysilane of Gander in the absorbent desiccant of Harada because Gander discloses the alkoxysilane for use in an absorbent to absorb bodily fluids (see composite compositions section), which is conveniently disposable (see summary).

It is argued that in summary, Gander discloses an interpolymer used for a water-barrier film... avoid the use of water. This is not persuasive because water absorbing is disclosed in Harada. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

It is argued that Gander also seeks to accelerate the crosslinking... (Col. 6, lines 11-20). This is not persuasive because Gander merely discloses that such acceleration "may" take place and does not require the presence of catalytic amounts, as Applicant appears to suggest.

It is argued that furthermore, Gander (like Harada) fails... within the polymer. This is not persuasive because Harada '867 discloses an absorbent comprising cationic absorbent polymer and anionic absorbent polymer fixed to a substrate through a binder,

Art Unit: 1754

which is crosslinked during or after polymerization (column 3, lines 45-48; column 5, lines 1-10; column 8, line 54 to column 9, line 16).

It is argued that as explained above, Harada does not... the claimed invention. This is not persuasive for the reasons above.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward M. Johnson whose telephone number is 571-272-1352. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley S. Silverman can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Application/Control Number: 10/622,752

Page 10

Art Unit: 1754

Business Center (EBC) at 866-217-9197 (toll-free).



Edward M. Johnson
Primary Examiner
Art Unit 1754

EMJ